

TECHNICAL STATUS REPORT

FOR THE PERIOD ENDING 30 Nov 94

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Executive Summary

During this month's reporting period, SQC continued to provide project management to the Backgrounds Data Center (BDC). In addition to the Project Manager, SQC provided management of the Operations, Software Development, Project Support, and Specification and Test efforts. The most significant events that occurred are the continuation of MSX Data System Tests, and the delay of the MSX Launch.

Task 1--Project Management Support

Abstract

This task requires SQC to provide risk management analysis, software cost estimates, procurement strategies, program office organization and staff planning, schedule and resource allocation planning, program planning and documentation, project control system accounting, and training.

Work Performed During NOV 94

Provided Specification & Test (S&T), Software Development, Operations, and Project Support Office input to MSX project GANTT and PERT charts for scheduling and resource allocation planning.

Provided S&T, Software Development, Operations and Project Support Office input to the monthly MSX and Core status reports.

Updated the Canonical Gantt charts.

Developed new GANTT chart format and produced GANTT schedules for the BDC.

Revised data bases to provide relevant metric information.

Designed and implemented an update to the Operations Distribution Log for the Unclassified Data Packing List form.

Anticipated Activities During DEC 94

Continue the production of GANTT schedules and PERT charts.

Continue to provide input for FY95 budget, project planning, and monthly status reports.

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Task 2--Management Plan Development

Abstract

This task requires SQC to develop and present program management plans, software development plans, configuration management plans, quality assurance plans, test plans, and independent verification and validation plans for use on Naval Research Laboratory's (NRL) programs.

Work Performed During NOV 94

Chaired seven Configuration Control Boards (CCB) which processed thirty-two (32) Problem Report/Change Request (PR/CR) actions. This included: eleven (11) new PR/CRs, nine (9) analyzes, five (5) implementations, one (1) validation, one (1) Quality Evaluation, and five (5) closures.

Resumed work on revising the Configuration Management Plan (CMP). The work on the CMP was suspended to work on Operational Configuration Management (OCM) and Archive Library procedures.

Three (3) software PR/CRs and eight (8) DCRs were analyzed; one (1) PR/CR and seventeen (17) DCR fixes were implemented; and thirty-six (36) DCRs were closed during this reporting period.

Managed SW development activities including that for MSX pipeline processing and for the Visual Interface for Space and Terrestrial Analysis (VISTA).

Anticipated Activities During DEC 94

Chair CCBs as required.

Continue work on the BDC CMP.

Produce the first draft of the BDC User's Guide.

Manage the delivery and installation of Build 4.1.0 of the BDC/MSX Pipeline Software.

Continue to manage SW development activities.

Task 3--Detailed Process Development

Abstract

This task requires SQC to develop and present processes (process flow diagrams, step-by-step procedures, quality assurance procedures, and quality checklists) to be used on NRL programs.

Work Performed During NOV 94

Managed the effort to upgrade all of the Operations Procedures. Sixteen (16) procedures were written and/or revised during this reporting period.

Authored twenty-two (22) OCM procedures and placed them under OCM control.

Drafted one (1) Process Flow Diagrams (PFD) for the MSX Approved for Shipping QC Procedure and a QC checklist.

Managed the effort to verify Operational process compliance through the use of Quality Assurance audits of procedures. Procedures were redlined and changes were incorporated into the procedures.

Anticipated Activities During DEC 94

Continue upgrading the Operational Procedures.

Continue Operational procedure QA audits.

Continue upgrading the Operational Configuration Management Procedures.

Manage the effort to update OCM and Archive Library procedures.

Task 4--Requirements Development

Abstract

This task requires SQC to meet with NRL scientists, users, customers, and others identified by the Contracting Officer's Technical Representative to document project requirements. SQC is required to document requirements in Type A and Type B specifications. The requirements are to provide program managers with capability for product assessment through analysis and testing of performance parameters. SQC is to determine performance requirements and demonstrate satisfaction through testing.

Work Performed During NOV 94

The BDC to SDAC ICD and the BDC to STB DAC ICD were released from OCM as interface requirements documents.

Received initial PLDAF comments for the BDC to PLDAF ICD.

Review comments for the BDC to OSDP DPC and BDC to EMDAC ICDs were received from internal BDC review.

DM review comments and OSDP DPC initial review comments were received for the BDC to OSDP DPC ICD.

Verbal conversations with both the EMDAC and DM were conducted for the BDC to EMDAC ICD, and as a result, additional work will be required on the BDC to EMDAC ICD.

Anticipated Activities During DEC 94

Release the BDC to PLDAF, BDC to OSDP DPC, and BDC to SEU DAT ICDs as requirements documents. Continue work on the BDC to EMDAC ICD.

Task 5--Documentation Review

Abstract

This task requires SQC to review documents prepared by NRL contractors in a variety of activities for compliance with relevant established standards, development plans, and management plans and to provide comments and recommendations to NRL. The task also requires SQC to perform

technical reviews and audits (formal design reviews, informal reviews, and administrative reviews) on NRL's contractor developed hardware, software, facilities, and management documents.

Work Performed During NOV 94

Reviewed the MSX Approved for Shipping QC Procedure.

Reviewed and signed the Archive Management Plan for Documentation and Data.

Signed three OCM procedures: CCB, PR/CR Handling, and the OCM Receipt procedure.

Placed six OCM procedures in BDC review.

Continued managing the preparation, review, and release of test cases and procedures for the MSX FOC testing activities.

Anticipated Activities During DEC 94

Review and sign OCM and Archive Library procedures.

Review other documents as required.

Continue updates to the STD. Provide S&T team support to the review of BDC documents and procedures and DM test procedures.

Continue to manage SW documentation efforts.

Task 6--Technical Information Preparation and Presentation

Abstract

This task requires SQC to prepare and provide formal and informal state-of-the-art techniques presentations in Project and Process Management disciplines.

Work Performed During NOV 94

Prepared and distributed CCB Minutes.

Prepared and distributed DM PR Status Reports.

Prepared and distributed status reports on Priority 2 PR/CRs.

Anticipated Activities During DEC 94

Prepare and distribute CCB Minutes.

Prepare and distribute DM PR Status Reports.

Prepare and distribute OCM PR/CR Reports.

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Task 7--Formal Test Case and Test Procedure Development and Execution

Abstract

This task requires SQC to develop and execute detailed test cases and procedures designed to validate designated developed products prior to their being declared operational. The testing must demonstrate that all system elements satisfy NRL requirements. SQC must also verify that testing spans the overall acquisition cycle.

Work Performed During NOV 94

Managed and provided guidance for the preparation of formal test cases, test case descriptions, and test procedures. During this reporting period, FOC testing continued. PR/CRs were initiated during the execution of the test procedures, primarily for operating procedures which do not implement FRD requirements. Eight new test cases and procedures were prepared.

During the reporting period, SQC continued the management of and coordinated the planning and preparation activities necessary to successfully execute Data System Tests (DST). These activities included processing and distributing Level 1A and DPC test data products for DSTs 3.5 and 5.4a. This task included test data receipt, tracking the status of Operator Discrepancy Forms (ODF), PR/CRs and Data Management (DM) Problem Reports (PR), monitoring approved revisions to the MSX pipeline software and operating procedures, the retesting effort, and closing all open DST issues. Worked with Operations and Software Development to find solutions to problems encountered. Communicated with MSX DM on PR resolution and other DST related issues. Reported to DM the progress and daily status of DSTs 3.5 and 5.4a.

The Specification & Test team, under SQC's management, acted as the central repository for problem reporting and resolution. This included coordination of problem resolution both internally at the BDC and externally among the other participating MSX data organizations. (4.7, 4.7.2).

Anticipated Activities During DEC 94

Coordinate BDC activities required to complete MSX DSTs 3.5 and 5.4a.

Continue managing the FOC testing activities.